

# SYMPTOMS OF NON-TOXIC NODULAR GOITRE

by

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IN 1932, Cecil Joll, in his book "Diseases of the Thyroid Gland" emphasised that "although respiratory symptoms due to tracheal compression and alteration of voice were common", dysphagia was a "decidedly rare feature of simple goitre". Since then there has been little documentation on the subject. The following is an account of the symptoms found in a series of patients undergoing surgery for nodular goitre.

## METHOD OF STUDY

For the purposes of this study a goitre was defined as a visible and palpable enlargement of the thyroid gland. In normal adults the average weight of each lobe is about 12 g. A combined weight of 35 g or more is both visible and palpable and hence constitutes a goitre. Multinodularity was demonstrated clinically by palpation and confirmed at operation and by pathological examination.

## PATIENTS

One hundred and thirty-six consecutive patients operated on for goitre by a single surgeon at The London Hospital during the years 1965 to 1974 were studied. Some patients came to operation for removal of a large, bilateral goitre while others were referred for treatment of a single nodule.

TABLE  
*Presentation of Nodular Goitre*

<i>Complaint</i>		<i>No. of patients</i>	<i>%</i>
Swelling alone		86	63
Swelling and symptom(s)		46	34
Respiratory symptoms	28 (21%)		
Dysphagia	23 (17%)		
Change of voice	17 (12.5%)		
None		4	3
		136	100

Patients presenting with a swelling alone were either anxious about malignancy or its cosmetic effect. Those who complained of dysphagia either said they had a peculiar feeling in their throat on swallowing, or that food actually stuck in their throat. Only patients who complained of "local" respiratory symptoms, such as difficulty with breathing localised to the neck region were included. Those with heart failure, bronchitis or other respiratory problems were excluded. A complaint of change of voice was either due to hoarseness or to increase in pitch. The clinical features are shown in the Table.

## RESULTS

Although no statistical correlation was found between the age of the patient, the weight of the gland and any symptom, a greater number of large glands was found in older patients. The weight range of the resected gland was 20–420 g (mean=103 g) and the age range was 17 to 79 years (mean=48 years). Two patients had all three symptoms, one was a 79 year old and the gland weighed 320 g. While the other was aged 53 and the gland weighed only 30 g.

Twenty-five per cent of the patients had some retrosternal extension of the goitre; sixty per cent of these (14 per cent of total) had one or more of the symptoms described.

In the series there were 11 male patients (eight per cent). Dysphagia and change of voice were more common in male patients but respiratory symptoms were less common. The increased incidence of the latter in females may be due to the peculiar "choking" feeling complained of by many female patients.

## DISCUSSION

The incidence of symptoms of multinodular goitre in a retrospective study of this nature is difficult to assess accurately. Clinical records are liable to be incomplete because the relevant symptoms may not all have been documented originally. However, these are not likely to be fewer than those recorded here. In this group of patients it appears that the incidence of dysphagia is higher than that described originally by Joll. While these figures serve as a guide to incidence of symptoms they must be used with some reservation, as they represent a selected group of patients.

The dysphagia experienced is probably not a true mechanical obstruction but only an impression of food sticking at the level of the swelling. Direct laryngoscopy revealed no vocal cord paralysis in those complaining of change of voice. Respiratory difficulty was extremely subjective, complaints varying from "shortness of breath" to "a choking feeling" in the neck.

All symptoms seemed to increase in intensity once the swelling was confirmed by a doctor.

### SUMMARY

Multinodular goitre is a common disease generally presenting with a lump in the neck alone (63 per cent) or with "local" difficulty with breathing (21 per cent) or dysphagia (17 per cent) and/or change of voice 12.5 per cent). These symptoms appear to bear no relation to the weight of the gland or the age of the patient, although the weight of the gland does increase with age.

No true mechanical cause for the symptoms could be identified, most being attributed to psychological awareness of the swelling.

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